



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,769	05/14/2001	Takashi Hotta	500.28166CX2	7218

24956 7590 12/27/2006  
MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.  
1800 DIAGONAL ROAD  
SUITE 370  
ALEXANDRIA, VA 22314

EXAMINER
----------

PAN, DANIEL H

ART-UNIT	PAPER NUMBER
----------	--------------

2183

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/27/2006	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/853,769	<b>Applicant(s)</b> HOTTA ET AL.	
	<b>Examiner</b> Daniel Pan	<b>Art Unit</b> 2183	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 17-40 is/are pending in the application.
- 4a) Of the above claim(s) 1-16 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-22 and 27-40 is/are allowed.
- 6) ☒ Claim(s) 23,24 and 26 is/are rejected.
- 7) ☒ Claim(s) 25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 2183

1. Claims 17-40 remain for examination. Claims 1-16 have been canceled.
2. Claims 23, 24, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeGroot (4,766,564) in view of Chevillat (4,615,004).
3. As to the newly amended feature of sequencer which caused the instruction fetch in one machine cycle, DeGroot did not specifically show the fetching of the plurality of instructions at one time in one machine cycle as claimed. However, Chevillat disclosed a system for fetching plurality of instructions in parallel in a machine cycle (see the instructions fetched in single machine cycle in col. 1, lines 32-39). The reasons of obviousness were already given in paragraph 4 of page 3 in the last Office action on 03/30/06.
4. The rejections to claim 23, 24, 26 have been maintained and incorporated by reference to the last office action on 03/30/06. However, upon further review, claims 17-22, 27-40 are allowable over the art of record for reciting the details of the connections of the arithmetic units and bypass circuit with signals in the register. Suggestion to correct the language such as operable to operated is recommended.
5. The response filed on 10/02/06 has been fully considered, but it is not persuasive.
6. In the remarks, applicant argued that :
  - a) DeGroot fails to teach the sequencer which causes the plurality of instructions to be fetched in one machine cycle, the plurality of instructions using a plurality of arithmetic units.

Art Unit: 2183

7. As to a) above, DeGroot did not specifically showed the fetching of the plurality of instructions at one time in one machine cycle as claimed. However, Chevillat disclosed a system for fetching plurality of instructions in parallel in a machine cycle (see the instructions fetched in single machine cycle in col.1, lines 32-39). The reasons of obviousness were already given in paragraph 4 of page 3 in the last Office action on 03/30/06. See also DeGroot's execution of plurality of instructions in a single cycle (see col.1, lines 11-25), which was a suggestion for fetching the instructions in a single cycle in order to maintain the bandwidth of the instructions being executed in a single cycle.

8. Claim 25 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the prior art of record further teaches the details of the connections of the arithmetic units and bypass circuit with signals in the register with the switches.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Pan whose telephone number is 571 272 4172.

The examiner can normally be reached on M-F from 8:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chan, can be reached on 571 272 4162. The fax phone number for the organization where this application or proceeding is assigned is 703 306 5404.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 2183

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

## ***21 Century Strategic Plan***

DANIEL H. PAN  
PRIMARY EXAMINER  
EBC/SP